

IDENTIFICATION OF A COMMUNITY'S PRIORITIZATION OF ITS POLICE SERVICES

IN LIGHT OF PROPOSITION 13 BUDGET REDUCTION 7 August 1979

by

Joseph A. Vogel

and

Robert T. Wallace

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IDENTIFICATION OF A COMMUNITY'S PRIORITIZATION OF ITS POLICE SERVICES IN LIGHT OF PROPOSITION 13 BUDGET REDUCTION

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THESIS

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A Thesis

bу

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Abstract

of

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Statement of Problem

Historically, police departments were derived from society and were as much a part of it as the cohesiveness and interdependence that defines the human community. As policemen became recognized as a unique social group, they began to counteract their segregation by establishing specialized programs to link themselves with elements in the community. These efforts are the basis of contemporary Police-Community Relations programs. Innovative programs and basic police services lead to a wide range of modern police responsibility. The need for organization and integration of these services into the community is the focus of this thesis.

Sources of Data

California's Proposition 13 provided the impetus for an administrative determination regarding specific reductions in the services provided by a police department. The community of Davis, California was surveyed to involve the community in determining: the type of non-criminal police services necessary, the degree of these services desired, and the prioritization of the services.

Conclusions Reached

Public prioritization not only provides a valuable administrative tool, but it also dovetails the police department and its services with community needs. Also, this method provides police with a means to organize their various services and Police-Community Relations programs into an integrated response to community-wide needs.

Collaborative Responsibilities

Responsibilities were divided among the authors for some sections of the thesis, other sections were cooperative efforts. The first co-author was responsible for the computer analysis of data and the interpretation of results. The second co-author was responsible for the literature review and a discussion of the methodology. Survey design, survey distribution, and the conclusions were cooperative endeavors.

Committee Chair's Signature of Approval:

Peter S. Venezia, Ph.D.

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CHAPTER I

INTRODUCTION

Police-Community Relations begins with the idea that police are an adjunct to the sense of community people seek when they form a society. Modern police service in the United States traces its roots to English society. Whisenand and Ferguson trace the nascent community relations programs from Robert Peel's ideas of police service. They derive from Peel a public relations program that consists of: a) Public understanding, b) Public confidence, and c) Public support. 1

Even this brief schema shows the bias of image-creation.

Peel's design leaves it incumbent upon the police to elicit certain feelings from the public through images of the police and not by the involvement of police in the community. Thus this program worked where there was pre-existent support for the police and not where the public was instantly hostile to police presence. As evidence of this, Wasserman, et al note that in London the police were known as "bobbies" and in Ireland they were called the "bloody Peelers."

Paul M. Whisenhand and R. Fred Ferguson, The Managing of Police Organizations, (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1973), pp. 380-381.

Robert Wasserman, Michael Paul Gardner, and Alana S. Cohen, Prescriptive Package: Improving Police/Community Relations, (Washington, D.C.: GPO, 1973), p. 1.

Whisenand and Ferguson go on to describe the development of Police-Community Relations to its contemporary peak. Quoting from the Institute for Training in Municipal Administration, they list the following goals of current programs:

- a. police-citizen partners in crime prevention,
- b. communication and mutual understanding,
- administration of justice is a total community responsibility,
- d. cooperation among elements of the criminal justice system,
- e. improve police-minority relations, and
- f. strengthen implementation of equal protection.

Whisenand and Ferguson's analysis was selected here because of its clarity and conciseness. The significant point to be gained is the move of Police-Community Relations from the very restrictive focus upon improving the police image to the more comprehensive interaction between broad departmental goals and sectors within the community.

Increasingly, Police-Community Relations programs are being aimed at enhancing the quality of life in the community rather than being programs that are self-serving attempts to create a favorable public image and sell police departments to otherwise unconcerned or hostile communities. The programs attempt to fulfill the previously stated goals from the Institute for Training. Contemporary programs have proven these goals to be more than a platitude or a theoretical viewpoint. But the specific programs that should be meeting the goals just enumerated for municipal administration are

Municipal Police Administration, 5th ed., quoted in Whisenand and Ferguson, p. 381.

more confined in application than the ideal would lead one to believe:

Support programs are more commonly known by such titles as the School Resource Officer Program (Tucson, Arizona), Ride-Along Program (Los Angeles County District Attorney), Bicycle Safety Program (National Safety Council), Crisis Intervention (New York City), Coffee Klatch Program (Covina, California), and Basic Car Plan (Los Angeles, California). Many prefer acronyms, such as P.A.C.E., Public Anti-Crime Effort (Monterey Park, California). All are vitally important and for a number of reasons, not the least of which is that they tend to involve the greatest number of police officers.⁴

The authors delineate specific programs that are designed to involve the time and energies of as many department personnel as possible with particular elements in the community. School, bicycle, and crisis programs are obviously intended for specific sectors of the community. Ride-Along, PACE, and Coffee Klatch open up opportunities for the whole public and are good programs, but for obvious reasons, the whole community does not participate.

Perhaps the following statement is a more thorough description of the limitations of these programs:

There will likely always be some degree of distrust of the police if only because they do have enforcement responsibilities. This does not imply that inroads cannot be made into distrust. For instance, an affirmative police response to the problems identified in the citizen complaint procedure can begin to reduce some distrust. In the same fashion, increasing the number of minority citizens employed as police officers can mitigate the perception of some that the police are exclusively a white man's tool for maintaining the status quo. These tactics focus basically upon surface issues, however, and they will not be sufficient to promote the kind of trust which will maximize partnership efforts in controlling crime and providing services.

 $^{^4}$ Whisenand and Ferguson, p. 387.

Just as many of the tasks inherent in the current police role stimulate much of the distrust, other tasks hold the key to easing it on both the individual and institutional levels. These include basically the social service and order maintenance tasks of the police.⁵

This quote describes the problems of dealing with effects and not causes, but its importance lies in the fact that the Advisory Commission finds promise in the service function of the police although anyone attending to the mass media knows that the primary, if not the only, function of the police is to control crime. They have defined the problem as dichotomous distrust and recommended seeking in the more mundane service aspects of police work for solutions. The underlying intent of many current community relations programs is to provide a public service. Yet, it is this very basic premise of cooperation and service that some authors feel has been lost in programs that deal with only the most vocal, powerful, or salient members of the community. Brown notes that the loss of the police department's sense of community has led directly to what he terms the death of Police-Community Relations. Quoting from an oft-repeated definition developed by the National Center on Police and Community Relations, Brown describes the failure of these kinds of programs:

⁵California Attorney General's Advisory Commission on Community-Police Relations, <u>The Police in the California Community</u>, Office of the Attorney General, March 31, 1973.

Police-Community Relations in its generic sense means the variety of ways in which it may be emphasized that the police are indeed an important part of, not apart from, the communities they serve. . . . 6

The above definition, unfortunately, was not adopted by police agencies in the operation of their programs. Hence, the position taken in this paper is that police-community relations as traditionally defined and operated by police agencies, have not achieved their objectives. Consequently, we are currently in a post community relations era. Police officials who once embraced police-community relations now discard it as a noble experience. Citizens who once eagerly supported such programs now discuss them with an aura of frustration. It is the position of this essay that if police agencies are to recapture the promise of police-community relations, they must stress new emphasis and pursue new directions.

Brown's discussion particularly centers upon the racial and ethnic aspects of the failure, but the central theme of an interlocking police and community is never lost. Specific programs meet specific, not general, goals and it is important to consider whether the successes of a particular program are meeting the demands of service to the community as a group.

Policemen are not components of a thin blue line resisting waves of criminals. There are no distinctions among persons to mark the differences between friend and foe reliably. In reality the paradigm of war leads to gross misunderstandings and fails miserably to reflect the actual business of policemen. Specialized programs sometimes fall into this paradigm and, with good intentions, the

⁶Police and Community Relations: A Sourcebook, quoted in Lee P. Brown, The Death of Police-Community Relations, Howard University Occasional Paper, vol. 1, no. 1 (Washington, D.C.: Institute for Urban Affairs and Research, 1973), p. 2.

⁷Ibid., p. 2-3.

police attempt to establish contact with the community. But all the while service is central to police duty and Police-Community Relations is central to the goals of a department. The potential for the service role is the promise it shows for the development of profitable community relations programs. Since social services consume so much of the department's resources, they can scarcely be overlooked by administrators. Social services are the essence of Police-Community Relations and the partnership of the police and the community. In developing this theme, the California Attorney General's Advisory Commission makes the following statement of particular interest:

We are talking about a police role which includes the responsibility for the development of community problem-solving resources, including:

3. Working with various publics in the community to establish priorities, including consideration of which problems are best served by a direct police response and which should be passed on to other agencies.⁸

The image of the police department as a crime control agency is in conflict with its actual performance as a public service agency. This conflict is at the heart of community relations. It is the recognition of the service function as a legitimate police role that will be the first great stride for Police-Community Relations. The services desired by the public that consume most of a policeman's time also provide the basis for police involvement with the community. Personnel involvement is one of the goals promulgated by many community relations programs, yet the California Attorney General's Advisory Commission recognized previously (page 4) that many community relations projects are not only peripheral

⁸The Police in the California Community, p. 13-6.

to law enforcement but may serve to conceal more profound issues that have dichotomized police and the public. Kelly noted also the relevance and potential for improving or affecting community relations through the activities most likely to be performed by police officers:

According to the evidence, both the rank-and-file citizens and the police believe that the most important function of police is fighting crime. Neither group paid much attention to the social work, social-service type functions which scholars now say account for 80% of a policeman's time. This social service area is to a large extent a power vacuum. It could be developed by citizens to the benefit of local residents while simultaneously benefiting police-community relations. (italics ours) The police do not seem to want control of these services; the performance of these services appears to be a severe burden from which policemen would like to be relieved.

The situation within the police agency is one of symbiosis with the community and primarily in the area of the police service function. There is no real reason for either police or community aversion to this role. Johnson and Gregory comment on the extent of the service function in police agencies:

Epstein (1962) estimated that 90 per cent of the policeman's function is in activities unrelated to crime control or law enforcement. Cumming, et al (1965) reported that half of the calls for assistance to an urban police department may involve family crises or other interpersonal nature. Raymond Parnas (1967) studying just one month of Chicago's 1966 police records, reported that of a total of 134,369 calls for police in the city of Chicago, 17 per cent were classified as "criminal incident." The remaining 83 per cent includes 12,544 traffic accident calls and 96,826 "Miscellaneous Non-Criminal." This "Miscellaneous Non-Criminal" category includes about 80 per cent of all calls for police service. Misner (1967) indicated that police departments have new missions in urban situations. The assumption has been that the policeman's task is to control crime and investigate criminals. Misner reports that more than 80 per cent of police time has been spent in noncriminal matters. These non-criminal interpersonal incidents include anything from a cat caught in a tree to a family quarrel,

⁹Kelly, Rita Mae, <u>Generalizations from an OEO Experiment in</u>
Washington, D.C., Journal of Social Issues, ed. Ezra Stotland, vol. 31.
no. 1, (Society for the Psychological Study of Social Issues, 1975), p.83.

to runaway children, to neighbors making too much noise. In other words the policeman makes very few arrests in comparison to the "human relations" work that he does. 10

Thus, the public and not just the criminal element is involved in the activities of policemen.

It is this idea of public involvement that leads to the concept of the police and the community pooling their resources in the search for solutions to mutual problems. The idea of a Community Resource Department includes the practice of a police department working in partnership with the community as a whole. The term has been defined by the California Attorney General's Commission on Community-Police Relations:

The commission recommends that community resource development be defined as the process by which law enforcement develops and sustains cooperative roles and relationships between the police and citizens emphasizing their partnership responsibilities for correcting the problem of crime and providing the social services required of the police. 11

As defined and practiced, community relations development is somewhat different from many police-Community Relations programs in existence. While Police-Community Relations emphasizes the need for a number of reasons, such as understanding the concerns of minority groups and maintaining the positive image of the policeman, a community resource program

¹⁰ Deborah Johnson and Robert J. Gregory, "Police-Community Relations in the United States: A Review of Recent Literature and Projects," in Police-Community Relations, Paul F. Cromwell, Jr. and George Keefer, (St. Paul, Minn.: West Publishing Co., 1973), pp. 353-354.

The Police in the California Community, p. 13-19.

goes beyond that. The idea of community resource development emphasizes the partnership between police and community. The police department is funded almost in total by the local community and therefore feels a responsibility to find out from the community what services they feel should be provided. Police service, the center of Police-Community Relations, should be a healing factor for any abrasions between the police and the public. The danger of limited programs in this regard is that they risk dealing with symptoms and not causes of the distance between the community and the police. In this same vein, it is possible that the whole concept of Police-Community Relations in a department may be limited to solving specific problems or reaching a specific group without consideration of the whole community.

The original goals and idealisms of Police-Community Relations have been redefined from the programs they engendered. The intent of community relations is to absorb the police into the community as an integral part of it. Kelly makes the following observation regarding the meaning of contemporary Police-Community Relations:

Current definitions of PCR range across assertions that the phenomenon is an art, a form of race relations, a philosophy, public relations, image building (sic), community service, community participation in police activities, and, in general, all behaviors and things done by police and citizens as they interact. Although one would approach absurdity if each definition were taken literally, there are some logical consequences of these definitions. For example, if PCR concerns only public relations and image building (sic), then no serious changes in the existing structure and pattern of police-community interactions are to be contemplated. If PCR is an art, based on emotional outlook, personality, and visceral reactions, would not sensitivity training be a likely program to adopt in efforts to improve police-community relations? However, if PCR is based upon a scientific foundation, experience and knowledge could be

studied and passed on to other policemen and citizens. Moreover, the approach to improving PCR would stress linking action programs with existing knowledge of human behavior and the points known to be critical in changing that behavior. 12

Image, art, and science are all elements of a good program, but they need not be mutually exclusive in any police department. The definitions here attempt to impose themselves on the concept of Police-Community Relations. The very basic consideration of police-community efforts, however, is the co-involvement, co-responsibility, and cooperation between the police agency and the public. It is apparent that the definitions provided by Kelly best serve as functional. Categories for specific programs and that community resource development more adequately describes the function of Police-Community Relations.

Briefly, community relations programs were spawned to create, or improve upon, a favorable police image. From this base, departments attempted to develop answers to their most acute failures; efforts to develop a liaison with minorities is an example. These specialized programs dealt not with communities, but with social subgroups, hence their limitations. Department-wide and community-wide cooperative efforts are most likely to be initiated by the police sector and department-wide programs intrinsically involve policymakers. Thus, the focus here is upon the police administrator. Specific programs suggest that each city's administrators should strive for creativity in order to achieve applicability of programs. As any manager knows, when everyone is responsible for an activity, no one is responsible. So it is with wonderfully innovative police-community programs: alternatives that are limited only by

¹²Kelly, p. 64.

one's creativity mean that there is no tangible alternative. It is the subject of our efforts here to seek limitations and an awareness of alternatives.

Harry W. More discusses Organization Development in police organizations in this same interdependent light that one finds in Police-Community Relations rhetoric:

When individuals and groups are working toward the solution of problems which affect other persons and groups, the problem is said to be interdependent rather than independent. In this situation people and groups have a common stake in the outcome and therefore need to have a voice in the solution. 13

The point of More's statement is that interdependency of problems and solutions necessitates interdependency of input, decisions in the police agency affect the community. It is only realistic for police administrators to recognize the impact of the political and public arenas upon the police agency. Organizations are symbiotic with their environments. An obvious comment here, but one that is all too often overlooked. The bulk of a police department's environment is the community of persons it serves:

The environment not only consists of customers, but also of competitive industries and in situations which react to induced changes in customer desires and demands with technological innovations and economical efficiencies. In fact, survival and perpetuation of the firm is directly linked to environment. 14

Approach, (San Jose, Ca.: Justiace Systems Development, Incs., 1975), p. 232.

August William Smith, MIS: Management Dimensions, ed.

Raymond J. Coleman and M. J. Riley (San Francisco, Ca.: Holden-Day, Inc., 1973), p. 95.

As a community firm charged with community service, a police agency must be even more attuned to its environment. Public service usually does not experience the competitiveness of private industry, but the customers and technology still exist. This Systems Approach describes more adequately the position of a police department in the community. The view taken here is that community relations is an idea intimately bound to the management of the whole department and cannot be confined to the responsibilities of a community relations element. The police agency is a subsystem in a larger community system and an approach to policy within the agency need not be segregated to a single unit that has sole responsibility for public liaison.

The police manager cannot make decisions with an eye restricted only to the operations of his department. As a public agency, the department is grossly affected by the public sector. Souryal addresses this idea:

. . . police decisions, contrary to modern managerial thought, are still considered quasi-political decisions. While policy decisions made by appointed chiefs of police are fairly independent from the political grip of local politicians, the case is certainly not so in sheriff's departments, at the constable level, and the like. Police decisions at these levels, and in many cases at the former as well, often have to be checked with the local political machine, with leaders in the community and with influential individuals. If some decisions fail to receive the approval of these "significant others" at the local level, they usually would have to be rectified or replaced. 15

Kelly noted an even closer relationship between the community relations programs espoused by a department and the political/community scene:

¹⁵ Sam S. Souryal, Police Administration and Management, (St. Paul, Minn.: West Publishing Co., 1977), p. 310.

The pilot project as well as several previous studies (Edwards, 1968: Mast, 1970) indicates that without the involvement of the community and greater overt recognition of the political nature of the problem, PCR units within police departments are likely to have no effect upon police-community relations. If PCR is a power relationship, then no relatively low ranking (sic) inspector or unit commander is in a position to do more than implement higher level (sic) decisions or conduct public relations "propaganda and pacification programs."

Decisions affecting key power dimensions such as the responsiveness and representativeness of the police force to the community, lie with the police chief and the political officials of the city. 16

Recommendations abound that police administrators must consider the public when making decisions. The point is being made palpable here, but it is difficult to determine the parameters and priorities that bear upon such decisions. The California Advisory Commission made the following recommendations:

Any effort to respond adequately to the many elements of the community relations complex must be acceptable to the members of the police profession and the various publics most intimately involved. The objectives of such a response must concurrently address the needs and concerns of both. As a minimum, the response must:

- 1. Optimize accomplishment of police goals without compromising either the law enforcement or service needs of the community.
- 2. Optimize citizen involvement in the accomplishment of mutually valued goals.
- 3. Provide viable mechanisms for ensuring that the above purposes are accomplished. 17

The above statement does not provide detailed criteria, but it does give one an idea of the state of the art. As long as the options of the administrator are limited and the community is unconcerned, vague guidelines will probably not have much effect. Souryal points to the

¹⁶Kelly, p. 65.

¹⁷The Police in the California Community, p. 13-2.

involvement of the community in a department's planning process, if not in reality at least as an ideal:

Aside from its role as a central guidance mechanism for the department as a whole, effective planning can be of direct assistance in these specialized areas:

7 - Police-community relations: by analyzing social trends, community expectations, public support; proposing programs for informing the public; soliciting community participation and involvement in the crime problem and devising means for stimulating police-community cooperation. 18

Souryal continues this theme of community involvement, or at least management's concern for the community, through to the everyday decisions in the department:

Decision-making is a rational process. While public agencies in the past often exercised arbitrary decisions and capricious whims by administrators, the conduct of government today has tended, or has been forced, to follow a line of rationality, objectivity, and adherence to reason. Contemporary decision-makers are compelled by the forces of modern management to think in terms of the public interest, to make their decisions within the constraints of available resources, and to apply democratic principles to their selection process. While absolute rationality is, of course, impossible, future decisions nevertheless will be more systematic, open to public scrutiny, and justifiable. 19

It is recommended by numerous authors that the administrator consider the community when forming policy that impacts on the community. This is only reasonable and pretty much apparent on the surface of things. The judgment of police management, however, is still of significance. Police officials are not placed because of their representativeness solely, they are expected to use judgment and apply whatever law enforcement expertise happens to be at their command to arrive at

¹⁸Souryal, p. 285-286.

¹⁹Ibid., p. 301.

reasonable and legal policy that is of benefit to the goals of the police agency and the community. The question at the heart of the matter is: How are these decisions to be made? The problem presents itself in these terms:

- a) What are the services being provided by police departments?
- b) Can the public decide upon the degree of service it wants and needs?
- c) How can police agencies work with the whole community in establishing programs and general operations that meet community needs?

The survey instrument dealt with in this monograph is designed to facilitate the interlocking of police and community efforts to deal with social problems and to address the problems set forth above. Services provided by the police upon demand, particularly those not specifically mandated by law, have been mentioned by the foregoing authors and agencies as sources of great potential in the field of Police-Community Relations. The design of the survey is such as to deal with this service area as a joint project. The community not only provides the fiscal parameters of police operations but also is the consumer of police services. The degree to which the community is willing to aid police efforts, to suffer diminished response, or to satisfy themselves with the loss of service is an item of some significance to police policymakers. On the other hand, police managers are presumed to be the experts in the operation of law enforcement and their decisions are expected to be reached against this background. It is the responsibility of the two groups, the police and the community, and the crux of Police-Community Relations, to pool their resources and derive the most

efficient and satisfying achievement of mutually agreed upon goals.

Thus the department with which this survey was used does not have a Police-Community Relations Unit, but a Community Resources Department.

The City of Davis has had, since 1973, an ongoing program that surveys the attitudes of both the community and the police department to:

. . . integrate them into, rather than separate them from, their communities; have positive effects upon officers' perceptions of non-officers, as well as the reverse; and, that create a positive climate of mutuality between police and private citizens. 20

The information obtained in these surveys fits well into the Organization Development model of management and the Davis Police feel they have gained quite a bit of useful information. The application of the survey data-gathering technique, though, has only limited value for the Organization Development philosophy as used in this paper. The input here may be owned by the community, but it is subject to modification by the police and city administration. The application is one of mutuality input. French and Bell take this view of data-gathering in Organization Development.

. . . data about the organization's human and social processes would usually be used more than technical data, financial data, market information, and the like. Third, in OD programs, the data usually "belong to" and are used by the people who generated them. This means that an attitude survey, for example, is not conducted just so that top management can study the results; rather it is conducted so that the contributors at all levels may have an accurate picture of the situations they confront and may then plan action programs to capitalize on the positive attributes and eradicate the negative attributes. 21

²⁰Peter S. Venezia and B. D. Bartholomew, "Community Survey of Public Attitude Toward Davis Police Department, 1974-1978." Davis, California, 1978. (Mimeographed).

Obviously, then, this paper's survey data is more conducive to positive decision-making couched in terms of systems theory. Organization Development applies in terms of the joint venture of police service with the community, but the area of human culture and values that Davis has considered in the past is not well covered in this particular survey instrument. The present survey deals in the social services of police and is designed to clarify community needs. Its intended use is as a backdrop to specific programs in a police department and a furtherance of Davis' Organizational approach. The City of Davis has been using the previous survey design to the following end:

. . . an annual survey of the community's attitudes and perceptions of the police department is conducted and the data is used to create an us situation rather than a we/they relationship. 22

The data collected concerning a prioritization of services is much more related to an issue than a process of police and community interaction, but does augment other activities involving the community.

Information-gathering provides the decision-making actors with a sound basis for action. The goal here is to specifically define and prioritize the service function of a particular police department and present a design and content that transfers easily to any department. Fenstermaker discusses a precise definition of problems in a system with a warning:

Wendell L. French and Cecil H. Bell, Jr., Organization Development, 2nd ed., (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1978)
p. 79.

James W. Evans, "Organization Development and Crime Prevention: Sensitivity to Organization Clientele," <u>Crime Prevention Review</u> 4 (October 1976): 9.

. . . identification of the true problem, peeling away layers of symptomatic deficiencies, may be the most difficult part of the entire process. Certainly, it may well be the most important, because unless the fundamental problem or system requirement is clearly identified, there may be a great deal of wheel-spinning in trying to arrive at a solution.²³

The purpose of deriving the desires of the client community and tempering these values with the expertise of police management and the realities of city administration is to develop a dynamic and resilient police agency.

The focus upon community issues, as opposed to community values, became increasingly appropriate in light of California's Proposition 13. With its passage, property taxes were cut by approximately two-thirds, which made for a considerable reduction in a municipality's general fund. This general fund is the major source of revenue for a police department. Because of the decrease in the general fund, several police departments stood to lose 30 to 40 per cent of their annual budget, a loss significantly affecting the services they could provide. The immediate problem was somewhat eased because of a five billion dollar state surplus that was used in part for "bail-out funds." While this "bail-out" money was graciously accepted, there was some apprehension in accepting the funds because no one was certain whether the sharing of the surplus would continue beyond the first year or would become non-existent in the near future. A few municipalities showed their concern by not accepting any funds at all:

Roy Fenstermaker, MIS: Management Dimensions, ed. Raymond J. Coleman and M. J. Riley (San Francisco, Ca.: Holden-Day, Inc., 1973), p. 103.

Some jurisdictions already refused to accept any part of the monies, knowing full well that they would be required to make it on their own in years to follow. 24

If reductions were made in the police department's budget the first items cut would probably be functions not seen as absolutely essential, such as crime prevention programs and possibly community-relations programs. Even with some of these programs eliminated, this probably would not match the decreased budget and department personnel would have to be released because approximately 70 to 80 per cent of the police department's operating budget is for personnel costs. If a number of police officers were released from any given department there would be a dramatic effect on the services the department would be able to provide.

With these possibilities in mind it becomes evident that police departments should be prepared to make adjustments in the services they provide to the community. As one police administrator in California pointed out:

The time to start looking at budget and manpower reductions is now. Contingency plans visualizing a 20 per cent reduction in funds and manpower is not unrealistic.²⁵

With the passage and implementation of Proposition 13 and the days of having to do more with less, the adoption of the idea of police and community partnership becomes more significant. If cuts in services and personnel are to be made, police administrators who are aware of what the community as a whole feels are essential. The question then

²⁴ Earl W. Rabitalle, "Tax Revolt, the Police Function and Police Training," The Police Chief 45 (November 1978): 24.

²⁵ John J. Norton, "Proposition 13: Law Enforcement's Unlucky Number," The Police Chief 45 (September 1978): 24.

becomes what is the best way to find out what the wants and needs of the community are.

Rational decisions and directions can be inferred only from valid information. Sources of information are invaluable to police administrators for responsible decision-making. There need be no startling new programs and strategies nor systemic overhauls if a keen ear is tuned to the community to which police departments cry for cooperation. Fink and Sealy write:

The cry of citizens for control over police simply represents the desire to participate with the police professional in defining crime in the neighborhoods and the nature of the police service the people are to receive. This seems to us to be a completely sensible aim, one that can lead only to increased citizen respect for police efforts. ²⁶

One method of gaining this information is a data-gathering survey given to the community as a whole, as was done in this particular case. With this type of information available, police administrators are in a much better position to decide what services to provide to the local community.

Traditionally, this has been an ill-defined area. Services provided by departments are considered on a case-by-case basis and may depend upon the personal feelings of the officer, public demand in the area, availability of personnel at the time, or almost any arbitrary and capricious factor at work in the police agency. Thus, it is imperative that some mutuality of goals be attained to avert friction. An explicit statement of the agency's environment by the survey instrument

Joseph Fink and Lloyd G. Sealy, The Community and the Police - Conflict or Cooperation?, (New York: John Wiley and Sons, Inc., 1974), p. 48.

elicits from the community a well-defined basis for management's considered judgments. The use of a community survey allows all sectors that are affected by police decisions to have an input into police activity. At the same time, police services can be coordinated into a framework of programs designed for the particular community.

CHAPTER II

METHODOLOGY

Davis is a community of about 34,000 persons, 15 miles from the major metropolitan area of Sacramento, California. The Police Department has surveyed the city for attitudes about the police and police performance for the past five years. Socio-demographic data gathered from these surveys reveal some characteristics of the population. The mean age of the population is slightly over 36 years old. Minority response ranges from eight to fourteen per cent. Over 92 per cent are high school graduates and about 50 per cent are college graduates. The number of full-time employed respondents ranges from 48 to 55 per cent over the last five years and, in addition to this, another 26 to 36 per cent are part-time workers. About 60 per cent of the respondents are married and the number of males versus females splits evenly at 50 per cent. The student population is between 15 and 20 per cent because the University of California at Davis is located there. 1

The Sample

The unit of analysis for the survey is the household. Households were selected by a dual-stage cluster sampling method with the clusters randomly selected. The sampling method used was the same as used by the Police Department in their survey of the city for attitudes

¹Venezia and Bartholomew, Tab A.

selected by the surveyor with the following criteria: one on each side of the complex, one survey on the first floor, and one survey on an upper floor. There are few apartments of more than two floors in the city. In the event sampling turned up the address of a business, the surveyor was instructed to contact first the owner, manager, or supervisor. The rule was to try to survey the person with the most possible personal involvement with the business.

Questionnaire Design

The survey this year, a self-administered questionnaire, was designed to provide a method for the public to rank police services by assigning them a particular score. The first part of the survey consisted of 44 short items, descriptive of services performed by the Davis Police (see Appendix A). The respondents were asked to assign to each item a score between 1 and 20, as a rating of the service's importance. The purpose of this method was to provide the simplest format with the least inconvenience for the respondent. A 1 to 20 scale was used to achieve a wide range of scores, reducing the possibility of tied scores.

The second portion asked the respondents to select five of the most important and five of the least important items from the previous list of 44. This forced choice approach allowed comparison with the scale ratings to determine whether the respondents had a response set that failed to distinguish among items. This examination of internal consistency established the validity of rated importance of the numerous services in relation to each other.

The next section of 15 responses consisted of items designed to gain information for the Police Department specifically. The subjects of these items were contributed by the Davis Police Department as areas of particular concern for them.

The final section contained items that served to describe the socio-demographic characteristics of the respondents, and permit subgroup analysis. Although the whole community stands to benefit from police services, some programs may be needed more by a particular group. Renters, for example, may require that some services be tailored to their needs.

Distribution of the Survey Instrument

The researchers desired a high return rate to ensure the validity of the survey responses in describing the community desires. To this end, surveyors delivered the surveys in person, explained the purpose of the survey, and made an appointment with the respondent for the completed survey to be picked up. This method was to increase the return rate, reduce response bias, and to motivate the citizenry to complete the lengthy questionnaire. (For most respondents the time required to complete the survey was 20 minutes.) Any one person in the household over the age of 17 was allowed to complete the survey. After at least two scheduled pickup appointments, but more on most occasions, if the target household had failed to complete the questionnaire, the surveyor asked the respondent to return the questionnaire in a post-paid envelope. This procedure met with some success, but because the surveys were

about police and police performance. The method used is described below:

Sample selection gave the most difficulty. There was (and is) no complete list of all Davis residents or households from which to select a sample. The only alternative was to use a geographic selection method. A four by eight foot map of the city, showing street addresses, was sectioned into approximately 1,000 one inch grid squares. Of these, 550 were chosen at random by selecting grid coordinates from a table of random numbers. A pin was stuck blindly into each coordinate "square" so selected. The address nearest the pin was identified as the household or business to be included in the sample.²

The method above has achieved exceptionally consistent results in such items as: per cent male and female, average age, per cent minority, etc. This consistency among items in which one would expect little variation from one year to the next, gives the researchers great confidence in the method. Therefore, for the purposes of the present survey, the researchers used the previous year's listing of addresses, addresses from the 1978 Davis attitude survey. The surveyor located the 1978 address, substituted the address next door to his left, and attempted to make contact. Contact was to be made with any adult over age 18 (voting age) in the household. Where an address was undeliverable (a vacant lot, unoccupied dwelling, warehouses, etc.) the address to the right of the 1978 address was substituted; and if that address was undeliverable the surveyor was to deliver the survey across the street from the 1978 address, then down the block to the right. Apartment buildings received three surveys for large buildings and two surveys for small ones as (was done) in the 1978 sample. Individual apartments were

²Ibid., p. 2-3.

confidential, once the subject had been asked to mail in the survey he could not be recontacted to improve the return rate.

Data Analysis

Because of the size of the sample and the large number of items used in the survey, the computer at California State University, Sacramento was used to help analyze the data. The computer program used was SPSS (Statistical Package for the Social Sciences).

Initial programs were run to obtain tabulated data and frequency distributions. After this initial information was analyzed, additional programs were used to crosstabulate various items. A "t-test" was used to determine whether the variables "sex," "residency," and "student status" resulted in significant item response differences.

Norman N. Nie, C. Hadlai Hull, Jean G. Jenkins, Karin Steinbrenner, and Dale H. Bent, <u>Statistical Package for the Social Sciences</u>, (New York: McGraw-Hill, 1975).

CHAPTER III

RESULTS

Overview of Results

The distribution of the survey consumed a four-week period.

Surveyors contacted 493 households in Davis and the breakdown of return rates is reflected in Table 1. Assuming that Davis has maintained a population of 34,000, this sample represents 1.45 percent of that population. Four hundred five surveys were returned, however 12 were mailed in past the deadline established by the researchers and Police Department thus the number analyzed was 393. These 393 surveys represent a sample size of 1.16 percent.

TABLE 1
SURVEY RETURN RATES

	- 	
	N	%
Surveys Returned:		
Picked up	360	73.02
Mailed in	45	9.13
	405	82.15
Surveys Not Returned:		
Not Mailed in	64	12.98
Refused to Participate	15	3,04
Respondent could not be		
Recontacted	69	1.83
	88	17.85
Total	493	100.00

The ratings of the 44 specific services are ranked on the basis of their mean scores and are given in Table 2. The mean scores of the 15 items of particular concern to the Police Department are shown in Table 3.

TABLE 2

RANK ORDER BY MEAN SCORES OF THE
44 SPECIFIC SERVICES

Question Number	Mean Score	Question
26	16.844	Assist sick or injured persons
17	15.572	Assist fire department by providing traffic control
25	15.238	Assist ambulance by control- ling traffic and bystanders
30	14.800	Search for missing persons, adult, more than 48 hours
8	14.584	Stop suspicious person in residential areas
7	14.463	Rape prevention/protection talks
38	13.660	Control crowds at special or community events
9	13.397	Control traffic and relieve congestion
32	12.682	Assist stalled motorists
22	12.604	Stop suspicious persons in business areas
31	12.491	Deliver emergency messages to people without phones

TABLE 2-Continued

uestion Number	Mean Score	Question
35	11.958	Investigate a report of smoke
40	11.786	3R Program
12	11.779	Check school buildings after hou
44	11.620	Operation Identification
21	11.535	Look for and report open door or window at business
16	11.526	Investigate vehicle accidents where there is no crime
19	11.513	Search for missing persons, adultess than 48 hours
20	11.053	Make written reports of traffic accidents for insurance
37	10.805	Make death notifications
6	10.635	Watch houses for vacationers
33	10.518	Conduct home security surveys for aid in burglary protection
18	9.046	Pick up, store and return abandoned bike to owner
15	9.003	Respond to neighborhood argument
13	8.936	Locate and report gas leaks
10	8.831	Periodically check bars and taverns
14	8.630	Disturbances between citizens, involving no crime
43	8.437	Respond to animal disturbances
3	8.234	Look for and report open door or window at residence

TABLE 2-Continued

Question Number	Mean Score	Question
1	8.126	Mediate family disturbances
34	7.623	Help persons locked out of homes
28	7.574	Help persons locked out of car
27	7.417	Take citizens on routine patrol for familiarization
5	7.408	Routine parking problems
42	6.881	Make written reports of lost checks or credit cards
11	6.694	Pick up dead or strayed animals
39	6.043	Escort valuables for business firms
29	5.787	Mediate landlord/tenant disputes
41	4.761	Escort valuables to their homes for citizens
4	4.690	Escort funeral processions
24	4.543	Investigate annoying phone calls, not threatening/obscene
36	4.390	Take fingerprints of job applicants for other agencies
2	4.331	Stand by while owner or manager closes store
23	4.056	Routinely give rides to citizens

TABLE 3
LIST OF 15 RESPONSE ITEMS
WITH MEAN SCORES

Question Number	Mean Score	Question
Resp 1	8.951	How quickly should police respond to situations in which property offenses have been committed and there is no hope of catching the offender at the scene?
Resp 2	8.601	How necessary is it for the police to respond to minor property offenses when there is no hope of catching the offender at the scene?
Resp 3	9.879	How quickly should police respond to com- plaints such as those of: dog bites, noisy parties, and abandoned bikes?
Resp 4	6.616	How necessary is it for a sworn officer vs. a trained para-professional (officer trained in police functions, but without "peace-keeping and arrest authority") to handle minor criminal and non-emergency situations such as petty theft, traffic control and reports on runaway juveniles?
Resp 5	11.963	How much emphasis should the police place on crime prevention programs, such as: community and personal safety talks, marking citizens' property, helping business design more secure buildings?
Resp 6	7.142	Truancy
Resp 7	11.747	Runaway
Resp 8	9.957	Problem behavior on school grounds
Resp 9	11.309	Children beyond parental control
Resp 10	8.475	Parent/child conflicts

TABLE 3-Continued

Question Number	Mean Score	Question
Resp 11	6.521	Shoplifting - in which the shopkeeper has not taken steps to prevent shoplifting?
Resp 12	5.941	Bad Checks - when identification of the check passer has not been requested by the check casher?
Resp 13	10.225	Burglary - through open doors or windows?
Resp 14	8.473	Thefts - of items left unlocked or unattended?
Resp 15	8.838	Auto Thefts - when keys have been left in the ignition?

One important note concerns the use of mean scores from the sample to prioritize the items in the survey. The mean score becomes subject to possible sampling error. It was felt worthwhile, therefore, to calculate confidence intervals for the respective means. Many of the confidence intervals overlap, due to the proximity of adjacent means (see Table 6, Appendix B). Thus, mean scores that are very close to each other should be viewed, for decision-making purposes, as sharing the same rank.

The socio-demographic information obtained by the survey agrees substantially with the results that have been gathered by the Police Department's attitude survey of the previous five years. The results

of this section and a comparison with the attitude survey are provided in Table 4.

TABLE 4

SOCIO-DEMOGRAPHIC DATA COMPARED WITH THE 5-YEAR SURVEY

		5-Yea	r Survey
ariable	1979 Survey	Low	<u>High</u>
ean age			
years)	38.1	36.0	36.9
x (percent)			
Male	51.0	48.0	51.0
Female	49.0	49.0	52.0
udent			
ercent)	25.7	25.0	28.0
mic			
ercent)	8.7	8.0	14.0
siness			
ercent)	9.4	7.0	12.0

Some variation between the prioritization and attitude surveys can be expected due to differences in item design. The 1979 survey asked for years and months of residency while the five-year survey asked for the number of years only. The 1979 survey broke students into full or part-time students while the five-year survey dealt with the categories "student" and "student in an apartment complex." The 1979 survey asked for business ownership while the five-year survey asked whether the person was a businessman or merchant. Some variation from past surveys

can be accounted for in the 1979 results in that respondents were also given the option of "O" to indicate that they did not understand the question; others, simply left the question blank. The variations are slight, however, and the present consistency with previous results is prima facie reason to accept the survey results as valid reflectors of the Davis population. The 1979 results are supported in that they demonstrate reliability of the methodology and reflect, externally to the survey instrument itself, a consistent picture of the Davis population.

As the results of the previous surveys serve to give credence to the external reliability of the 1979 sampling methods, so the "Bottom 5" and "Top 5" categories of prioritization lend credence, analogously, to the internal consistency of the survey. Even though only the Top 5 and Bottom 5 were asked to be ranked in the survey it was found that the Top 6 and Bottom 6 were ranked similarly, thus 6 items were used in the table. A comparison of the Top 6 and Bottom 6 rankings with mean score rankings is given in Table 5. One can readily discern the consistency of the top 6 items and the bottom 6 items with the mean score ranking method; the results are the same with only minor variation. This kind of consistency strongly indicates that the rankings reflect the true feelings of the public, particularly in those twelve items which were specifically ranked by two separate systems.

Groups that were examined with respect to the socio-demographic information requested on the survey were: "Sex" (male and female), "Student" (full-time and non-student), and "Residency" (rent and own).

These groups reflected some significant differences between mean scores they gave to the same item. The items all ranked, with their significance and scores, in Tables 7 through 9 in Appendix B.

TABLE 5

COMPARISON OF THE SIX SERVICES CHOSEN AS MOST IMPORTANT AND THE SIX SERVICES CHOSEN AS LEAST IMPORTANT WITH INDIVIDUAL MEAN SCORES

Most Important					
Rank	Selected as Top 5 (Question Number)	Individual Mean Score of Service (Question Number)	Mean Score		
1	26	26	16.844		
2	17	17	15.572		
3	7	25	15.238		
4	8	30	14.800		
5	25	8	14.584		
6	30	7	14.463		
	Leas	st Important			
1	23	23	4.056		
2	36	2	4.331		
3	4	36	4.390		
4	2	24	4.543		
5	41	4	4.690		
6	24	41	4.761		

INTERPRETATIONS OF SURVEY RESULTS

The interpretation of results is developed along the lines of the three areas under study: ranking of specific services,

Police Department contributed items, and significant differences between item mean scores by subgroups in the Davis population.

Ranking of Specific Services

Specific factors in the community's prioritization of services can be inferred from the item rankings. The four primary items clearly indicate a public concern for services that are potentially lifesaving. They include:

assisting the sick or injured, assisting the fire department, assisting ambulances, and searching for missing persons, more than 48 hours.

The six services that are ranked immediately below the first four are all items that are the sole responsibility of a police department and not of another agency. Among these items are:

stopping suspicious persons in residential areas, rape prevention/protection talks, controlling crowds at special events, controlling traffic flow, assisting stalled motorists, and stopping suspicious persons in business areas.

None of the above items are a responsibility or partial responsibility of another agency in Davis.

The final items pertain to services that are provided by other than police agencies. These are numerous, but they are listed below in brief to support this point:

item

agency

lost checks, cards
stray, dead animals
escort valuables
landlord/tenant disputes
funeral procession
annoying phone calls
take fingerprints
stand by while manager
closes store
give rides to citizens

card issuer, bank animal control private security small claims courts funeral director phone company charge for service

private security
public transportation

Comments written on the surveys tend to confirm further the hypothesis that these items were ranked low due to the responsibility of other agencies. Respondents frequently scored the item low and indicated which agency they believed to be responsible. These three factors:

potential harm singularity of police responsibility, and the degree of another agency's responsibility

appeared to be the primary ones affecting citizens' decisions about police services. The median-level items indicated the following areas of community focus:

crime prevention,
personal liability,
immediacy,
topic of current concern, and
frequency of the incident

Items such as: rape talks, stopping suspicious persons, Operation ID, and watching homes for vacationers, are all indicative of crime prevention concerns of the public. The investigation of vehicle accidents where there is no crime and written accident reports for insurance purposes show a need for police objectivity in incidents of personal liability. Emergency message delivery and death notifications are not, of

necessity police services but the community believes they are important services that should not be delayed because other agencies are responsible. Stopping suspicious persons in residential areas, checking open doors and windows in residential areas, and rape talks may reflect current community concern for an area rapist who has not been apprehended. Controlling traffic, returning abandoned bicycles, and animal disturbances represent the public's concern for reducing the frequency of these problems. All of these items lead one to place weight on a variety of factors and the above elements appear to increase the priority that the community assigns an item.

Police Department Contributed Items

The variety of items in this section do not fit into a single category so that they may be prioritized in relation to each other. An item that concerns the probability of arrest does not compare with one on the importance of police paraprofessionals. These items were given a score to indicate a degree of community concern.

The Police Department desired to gain from the responses to these questions an estimate of community concern so that police and city administration could have public input into areas that consume police resources but in many cases produce only limited results. Through these items the community was allowed participation in the specific administrative cost/benefit analyses in the Police Department. The value of

¹For example, a rapist known as the East Area Rapist had committed a number of rapes around the Davis area and had not been apprehended. Due to this a number of concerns such as residential security and rape talks may score higher than usual.

these fifteen responses is in the mutuality of police administration and community participation. The general areas that scored highest and seemed to be of community interest were crime prevention and concern for wayward children. Through the use of this information the Police Department may be able to emphasize programs related to these areas, now that it knows how the community feels.

Population Group Input

The community of Davis was examined for the inputs of three groups. Two groups, ethnic minorities and business owners, did not compromise enough persons in absolute frequency to be validly examined by t-Test comparisons. They were 34 and 37 persons, respectively, of the 393 respondents. Subgroups, or attributes, of the three variables used were compared item by item for significant differences in mean scores. Although some items did show the responses of two distinct subgroups (male or female, renter or owner, student or non-student), the scores were not widely disparate from each other on the 20-point scale. In other words, although a difference of two points between mean scores may be enough to note a significant difference between males and females, it is not enough to justify a separation of services provided to any specific group. Males and females, for example, differ significantly on the importance they assign to searching for adults missing for more than 48 hours, yet the two mean scores are 14.0604 and 15.4831, respectively. The difference of 1.4227 between the scores still means that both groups are very concerned about searching for missing adults. A useful finding from the administrator's perspective would be high versus low scores or

a trend that shows the factors in the subgroup's decisions unique from the population at large.

The scores given by the subgroups reveal little variance from the population's priorities. Renters and owners may differ significantly on the importance of rape talks, but both rate rape talks highly. The difference is one of statistical significance reflecting a correlative relationship between residency and a particular item.

The purpose of the t-Test examination was to note discrepant means between subgroups and to identify any classes of services for which the specific subgroups had different needs. If there were concerns specific to subgroups, or different factors in their decision-making, the police administrator might gain considerable insight into the expectations particular subgroups have for the police.

This was not the case in Davis, however. The subgroups showed substantially the same priority concerns as the entire population. Differences, though statistically significant, were not great enough to justify differential decisions for separate subgroups. Davis appears to be, then, a substantially cohesive community regarding police services. The overall survey results reflected prioritizations consonant with the rankings of subgroups. This is a conclusion of considerable import for Davis, but its application to other communities is not warranted. But the need for expanding research efforts to other communities is indicated.

CHAPTER IV

DISCUSSION AND CONCLUSION

Assumptions in the Methodology

The sampling method was based on a geographic sectioning of a city planning map of Davis. This method ensured that the physical dispersion of the Davis population was sampled. Thus, since housing is usually grouped geographically by some cost pattern, all economic, student, and ethnic areas are sampled if they happen to be geographically and economically distributed in Davis. Whether there is geographic natural clustering or not, this procedure does provide an arbitrary means of initially clustering the sampling frame and ensuring that all elements of concern to the Police Department are included in the sample.

The primary cluster was selected by this geographic method.

Assumptions underlying the selection of the primary cluster are essential to a thorough understanding of the inferences that can be made from the data collected. Four Hundred Ninety Three one-inch grid squares were actually used out of the 1,000 that covered the geographic area of Davis. It is a premise of clustering that significant groups in the population are large enough that they would cover geographically at least two of the grids. It is implicit also that a consequential group would not be so densely populated that they would occupy only a single grid square and be wholly missed or be under-represented if the group

covers several grid squares more densely than the rest of the population. This kind of disparity would be most likely where there are also distinct economic patterns and the economically disadvantaged occupy particularly dense areas. In Davis, however, there is only a very small minority population, a large portion of the population is employed, and for five previous years only four per cent of the people have considered themselves poor. Davis is hardly an area in which the economically disadvantaged would introduce bias into the sampling.

On the other hand, it should also be pointed out that the survey includes both residences and businesses. There is a presumption here that owners of a business who reside in Davis are such a unique group that it is extremely unlikely they would be twice surveyed, thus causing an advantaged group to be represented by twice their number. As a matter of fact, surveyors found only one instance of this out of 493 contacts.

The above assumptions are theoretically possible, but not very probable in Davis' case. The reliability of results over five years of replication further undermine the possibility that the above assumptions are true and introduce bias into the sampling methodology from outside the survey design.

Conclusions of the Survey Design

We have focused upon the community's input into police activities designed to serve the citizenry. In this case, the methodology has been

 $^{^{\}mathrm{l}}$ Venezia and Bartholomew, Tab A.

used to validate the design of the survey, to prove its usefulness as an instrument of community input. It is not to be construed that the methodology describes the only way the survey instrument may be used. The procedures here are somewhat extraordinary to ensure that the format is amenable to input from all segments of the community and is at the same time of practical application to police administrators. These goals would not have been met had a complacent public yielded a low return rate. Also, the survey is rather lengthy since several formats are involved and the researchers wished to know if the different formats affected the quality and quantity of response.

The point has been made, too, that the items selected as most important and least important in the Top 5 and Bottom 5 categories closely paralleled the most important and least important items in the section of scored items. Because the results from the two methods agreed, the survey seemed to reflect the true feelings of the respondents. Thus, one gains confidence in the ability of the community to rank services in the survey format.

The soundness of sampling and the validity of the two formats for services sustain the proposition that police functions can be ranked simply and accurately by the community. A listing of services in brief form and their scoring by the public is sufficient to rank them for input into police administration.

The items contributed by the Davis Police Department do not constitute a group of general police services. Some of these items are very different police functions and their scoring cannot be placed

along the same continuum as the first section of 44 items. These items were somewhat revealing of the police viewpoint, particularly with regard to items that represented some more general classes of services. For example, the police felt that dog bites, noisy parties, and abandoned bicycles can be grouped as items all representing a class that burdens law enforcement officers and keeps them from more important crime control functions. Also items regarding whether the crime scene is cold, which lessens the chance of making an arrest, or whether the victim is complicit, suggest the frustrations of police officers in not getting adequate citizen involvement in crime suppression. Another item was added to examine the public's reaction to the use of para-professionals within the police department. Because of the community cooperation necessary in these situations, the department desired an indication of public concern in these areas.

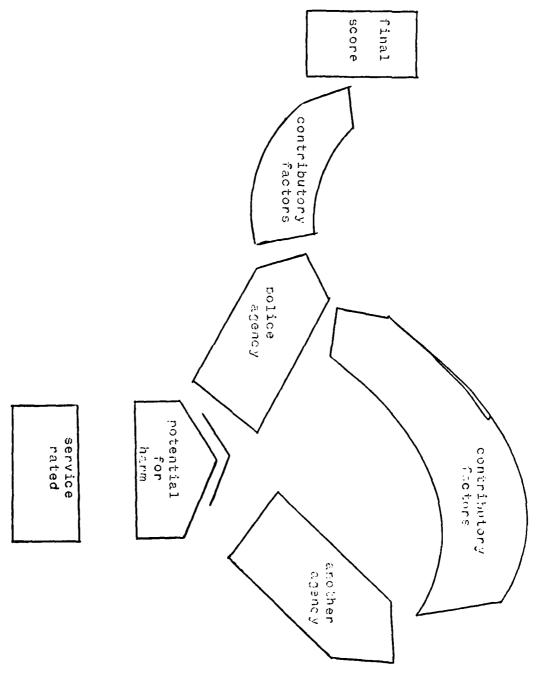
The 15 response items give the Department an idea of how important the community sees each particular item. They should not be considered with all the previous services nor concatenated themselves, but may be examined by administrators to determine the degree of public concern related to each response item. The point of this section is that community input can be gained from singular items not necessarily drawn by a common thread. Community input is a factor wherever there is community concern for the activities of the police. Here, the administrator may group these items together for budget purposes, may look for items that affect the quality of police service, or estimate public apprehension for low priority criminal items.

Decision-making by the Community

Administrators can find a meaningful line of thought in the decision-making process of the public. Running through the 44 services in this survey is a trend in this process that may be transferable to other services not specifically included or, possibly, applicable to other police departments. Thus, though a survey may be the most exacting method, a look into the community mind of Davis may indicate a useful analytic shortcut for an administrator who cannot use the survey method. The reader may refer to the diagram on the following page for a representation of the community mind.

The chart shows that the first category of public concern is whether the item may be of any potential physical harm. Harm is a category unto itself; it is the first consideration. It is significant that the top-ranked items are not primarily police items, but they are still thought important enough to merit strong police response. The public then reaches a bifurcation. The services are divided into items primarily of police responsibility and items primarily the domain of another agency. To determine the priorities more finely, an accumulation of contributory factors increases the importance of an item under each of these categories. These factors increase the ratings of items belonging to other agencies until they peak at the point where there are items of police responsibility. The items of police responsibility affected the least by contributory factors begin the rise in priority again. Contributory factors determine the finer priorities within two of the primary categories: police agency and other agency responsibility. An administrator who

Diagram of Community Decision-Making



decides on his own authority, which services to pursue would do well to consider the primary categories and contributory factors significant to the public.

Significance of Subgroup Findings

In the prioritization of the 44 items Davis has not shown wide differences in the subgroups in its population. Three subgroups were dealt with as possible community factions. Controlling the items for attributes of Sex, Residency, and Student Status failed to show any gross differences in scoring. This is possibly indicative of the homogeneity of Davis and that these variables are not enough to cause dissension among the population. There is also another interesting possibility. The variables may be sources of contention on other issues, but Davis is homogeneous in its response to their prioritization of the police service function. This suggests that communities may give homogeneous responses to the importance they assign to services they desire from the police. If this is true, as in the Davis case, it is an exceptionally significant finding for Police-Community Relations. It means that the prioritization of services is not only an administrative decision but also a cohesive community decision that can draw factions together with the police in deciding what program of services the community requires of a police department.

It is suggested here that Davis has factions, but the factional aspects of Davis have not surfaced in their prioritization of police service. One would suppose that other factions than the three cited

might show disparities among their rankings, but the real problem is working with a single variable. Minorities that are also economically depressed represent a whole constallation of variables. Groups of this nature are whole categories in themselves. Small communities, like Davis, may tend to be homogeneous in service requirements. Large communities have areas (precincts) that are conglomerations of smaller ones. There may be some medium-sized community with a heterogeneity that may be devisive, but to be missed in a survey the factions will have to be large enough to have their own subgroup problems while so small that they go unrecognized by the police and the community both. Subgroups can be differentiated for input and service. They can be overlooked only if they are small and are not salient to the rest of the public or the police. However, it is the possibility that police service can be a point of community agreement and police-community partnership that is particularly intriguing.

Administrative Application

The community's input into police decision-making is not legislation. It is a partnership of police administrative discretion and community involvement in a public agency. The input of the community is placed into the administrative milieu. Political factors, budgetary and manpower constraints, the professional expertise of administrators, police unions, etc., impact upon services rendered. The keystone is the police administrator who combines all inputs to arrive at a final decision. Our point is that the community deserves an input. The police manager may then develop his own options. Among these are the use of para-professionals for costly or low-priority items, elimination of services,

reducing response time or aggressiveness in pursuit of low-priority items, putting specialized personnel into high-priority items, etc.

An administrator eliminating certain services should consider the same points important to the public. Items preventing physical harm should be the least likely eliminated. When a survey is used, small differences in mean scores should be secondarily prioritized by the administrators through balancing all inputs. The survey provides definitive community input to the administrator's decision-making position. An examination of priorities established in Davis sheds light upon the factors perceived significant by the community, thus providing a guide for administrators who, increasingly have to make the hard decisions of resource deployment during a time of tighter budgets.

APPENDIX A

COMMUNITY PRIORITIZATION SURVEY



CITY OF DAVIS

226 F Street Davis, California 95616 (916) 756-3740

March 21, 1979

Dear Davis Resident:

The Davis Police Department, as well as other city agencies, is faced with some difficult decision making and we would like you to take part in the process. Your cooperation in taking the time to give us your opinions is greatly appreciated because your input is important. Also, your responses will be kept completely confidential. Please do not sign your name.

The Police Department is a public service agency which exists to help maintain an orderly and safe community. In order to accomplish this, it must do things that the ordinary citizen cannot do. For example, it investigates felonies and identifies those responsible for the offenses. It does other things, too, that contribute to order and safety, but are not dictated by law: picking up abandoned bicycles, running burglary prevention programs, etc.

As you may be aware, current economic necessity has decreased the Police Department budget despite increased costs. Davis has expanded and its population has grown without adding police to the department. This situation is not likely to improve in the near future; probably, it will get worse.

Further reductions in the police budget may occur in the next budget year, and the department has reached the point where it cannot continue "doing more with less." It is confronted with the decision to cut back on services—to reduce the level of some services, and to eliminate others.

These decisions cannot be made lightly, nor should they be made in the absence of thoughtful guidance from all segments of the community—from the community at large. So, we are asking you to take part in the decision making about your Police Department.

The basic questions we would like you to keep in mind as you respond to this survey are: "How essential to you are the listed police services being provided?" and "What level of this service is necessary?" The survey is in several parts; please try to complete each of them.

We sincerely thank you for your participation.

Very truly yours,

S. D. BARTHOLOMEW
Chief of Police
Davis Police Department

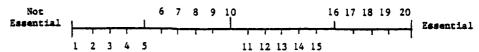
708 Third Street Davis, CA 95616

BDB:ctw

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PART I.

Below is a list of services, not specifically required by law, that are being provided by the Davis Police Department. This list does not include required activities, such as felony investigations. For each service decide how essential it is to you by thinking in terms of this scale:

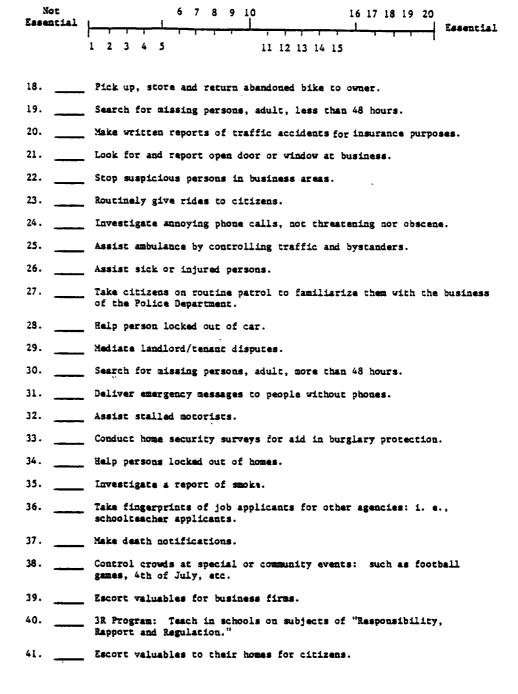


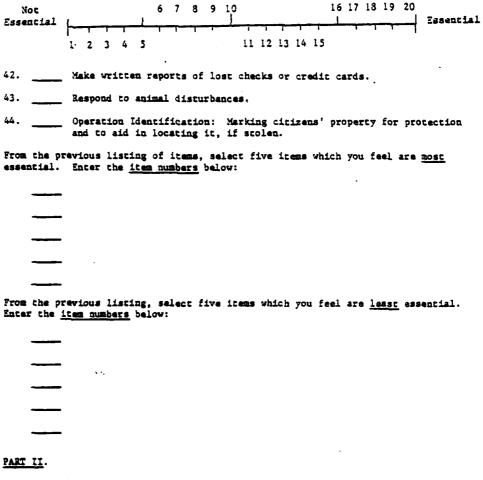
Essential: The quality of your life would be seriously affected if the service did not exist.

Not Essential: Your life would not be affected by its absence.

To the left of the given service enter your rating of from one (not essential) to twenty (essential). For any of the services with which you are not familiar enough to make a decision, please enter a zero (0).

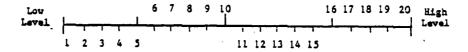
- . ____ Mediate family disturbances.
- 2. ____ Stand by while owner or manager closes store.
- 3. ____ Look for and report open door or window at residence.
- 4. ____ Escort funeral processions.
- 5. ____ Routine parking problems.
- 6. ____ Watch houses for vacationers.
- 7. ____ Rape prevention/protection talks.
- 8. ____ Stop suspicious person in residential areas.
- 9. ____ Control traffic and relieve congestion.
- 10. ____ Periodically check bars and taverns.
- 11. Pick up dead or strayed animals.
- 12. Check school buildings after hours.
- 13. ____ Locate and report gas leaks.
- 14. ____ Disturbances between citizens, involving no crime.
- 15. ____ Respond to neighborhood arguments.
- 16. ____ Investigate vehicle accidents where there is no crime, just damage.
- 17. ____ Assist fire department by providing traffic control.





For the following questions, please use the twenty point rating system. However, in these cases, think in terms of a "Low Level" (one) to a "High Level" of service, or any rating in between.

Again, if you find yourself unable to give an opinion for a given service, enter a zero (0).



LOW	0 / 0 9 10 10 10 19 29 High
Level	Level
	1 2 3 4 5 11 12 13 14 15
	How quickly should police respond to situations in which property
	offenses have been committed and there is no hope of catching the
	offender at the scene?
	Examples would be: vandalism, theft and minor burglary discovered
	after the offender has departed.
	High Level = immediate responses
	Low Level = as the police could get to them
	•
	How necessary is it for the police to respond to minor property offenses
	when there is no hope of catching the offender at the scene?
	High Level = police respond to scene in every case
	Low Level = incident taken completely by telephone
	How quickly should police respond to complaints such as those of:
	dog bites, noisy parties, and abandoned bicycles?
	High Lavel = immediate response
	Low Level = as the police can get to them
	and the posterior and the same
	How necessary is it for a sworn officer vs. a trained para-professional
	(officer trained in police functions, but without "peace-keeping and
	arrest authority") to handle minor criminal and non-emergency situations
	such as petty theft, traffic control and reports on runaway juveniles?
	High Level = sworn officer
	Low Level = trained para-professional
	How much emphasis should the police place on crime prevention programs,
	such as: community and personal safety talks, marking citizens' pro-
	perty, helping business design more secure buildings, etc.?
	High Level - department maintains a special full time unit
	Low Level = no special program
a	
	degree should the police devote resources to noncriminal misbehavior
as indi	cated by the items below?
	High Level = as much as are available
	Low Level = none, ignore them
	· · ·
	Truancy
	Runaway
	/
	Deckler habourer on sales I seemed
	Problem behavior on school grounds
	At 11 to an it would be some it with a
	Children beyond parental control
	Parent/child conflicts

Low Level	1	6 7 8 9	T	16 17 18 19 2	0 High Level
	1 2 3 4 5		11 12 13 14		7
(High L	evel) as compare precautions (Low High L	d to simply Level) in s evel = police	trying to educa	ces	
	Shoplifting - i shoplifting?	n which the	shopkeeper has	not taken steps to	prevent
	Bad Checks - wh requested by th			eck passer has not	been
	Burglary - thro	ugh open door	rs or windows?		
	Thefts - of ite				
	Auto Thefts - w	hen kays hav	e been left in	the ignition?	
PART II	<u>I</u> .				
How los	g have you lived	in Davis?	Years	Months	
Are 90u	: Male? Female?				
What is	your age?				
Do you:	Rent your pl	ace of residence of residen			
Are you 1. 2. 3.	A full-time A part-time Not a studen	student?			
Are you 1. 2.	a member of an Yes.	ethnic or ra	cial minority g	roup?	
Do you 1	own/operate a bu Yes. No.	siness in Da	vis?		

TABLE 9
SURVEY ITEMS FOR WHICH RENTERS AND OWNERS DIFFERED SIGNIFICANTLY

Question Number	8 • • • • • •		Scores
MUMBET	Probability*	Rent	Own
2	0.002	5.2109	3.7100
7	0.040	15.2296	13.9959
8	0.019	13.6370	14.9794
12	0.009	10.7388	12.2992
16	0.035	12.3630	11.1033
18	0.050	9.800	8.5455
22	0.004	11.3806	13.1088
23	0.001	5.1462	3.4914
28	0.030	8.3806	7.0661
29	0.001	7.0530	5.1519
39	0.018	6.9147	5.4553
40	0.017	10.7597	12.3333
41	0.008	5.6462	4.2318
42	0.043	7.6641	6.3432
44	0.004	12.8346	10.9129
esp 3	0.039	9.0308	10.2996
esp 8	0.014	8.9542	10.5084

^{*}Obtained by t-Test comparison of mean scores.

APPENDIX B
T-TEST ANALYSIS TABLES

TABLE 6

CONFIDENCE INTERVALS FOR THE FORTY-FOUR RANKED SURVEY ITEMS*

Item Number	Ranked Mean Score	Confidence Interval
26	16.844	± 0.524
17	15.572	± 0.632
25	15.238	± 0.660
30	14.800	± 0.710
8	14.584	± 0.684
7	14.463	± 0.732
38	13.660	± 0.687
9	13.397	± 0.670
32	12.682	± 0.708
22	12.604	± 0.744
31	12.491	± 0.817
35	11.958	± 0.906
40	11.786	± 0.806
12	11.779	± 0.733
44	11.620	± 0.807
21	11.535	± 0.767
16	11.526	± 0.732
19	11.513	± 0.811

^{*}The following calculations represent the confidence interval nt of 0.01 and df. The confidence interval is 99 percent t0.01=2.576.

TABLE 6-Continued

Item Number	Ranked Mean Score	Confidence Interval
20	11.053	± 0.815
37	10.805	± 0.937
6	10.635	± 0.769
33	10.518	± 0.745
18	9.046	± 0.775
15	9.003	± 0.693
13	8.936	± 0.914
10	8.831	± 0.746
14	8.630	± 0.682
43	8.437	± 0.741
3	8.234	± 0.752
1	8.126	± 0.751
34	7.623	± 0.739
28	7.574	± 0.751
27	7.417	± 0.781
5	7.408	± 0.714
42	6.881	± 0.802
11	6.694	± 0.773
39	6.043	± 0.757
29	5.787	± 0.668
41	4.761	± 0.655
4	4.690	± 0.703
24	4.543	± 0.610
36	4.390	± 0.670
2	4.331	± 0.592
23	4.056	± 0.635

TABLE 7

SURVEY ITEMS FOR WHICH MALE AND FEMALE RESPONSES DIFFERED SIGNIFICANTLY

Question		Mean Scores		
Number	Probability*	Male	Female	
4	0.034	4.1044	5.2921	
6	0.048	10.0108	11.2088	
7	0.018	13.8396	15.2044	
8	0.004	13.7660	15.3444	
9	0.004	12.5372	14.0670	
19	0.022	10.7473	12.2184	
27	0.011	8.1658	6.5955	
30	0.012	14.0604	15.4831	
32	0.010	11.9786	13.4000	
35	0.011	12.7500	10.9143	
41	0.037	5.3152	4.2202	
Resp 7	0.000	10.6541	12.8192	
Resp 10	0.038	7.9071	9.4407	
Resp 13	0.016	11.0106	9.4407	
Resp 15	0.017	9.5503	8.0114	

^{*}Obtained by t-Test comparison of mean scores.

TABLE 8

SURVEY ITEMS FOR WHICH STUDENT AND NON-STUDENT RESPONSES DIFFERED SIGNIFICANTLY

	· · · · · · · · · · · · · · · · · · ·			
Question Number	Probability*	Mean : Student	Mean Scores Student Non-Student	
Number	Froudulticy"	Student	non-student	
2	0.001	5.8101	3.9019	
7	0.000	16.3529	13.7329	
10	0.031	7.5422	9.0693	
23	0.006	5,3625	3.6504	
28	0.022	8.6786	7.1014	
29	0.000	7.6386	5.1956	
33	0.005	12.0361	10.0254	
34	0.025	8.7711	7.2058	
38	0.021	12.3882	13.8925	
39	0.010	7.4634	5.5821	
41	0.005	6.0988	4.3008	
42	0.030	7.8675	6.2528	
44	0.000	14.3976	10.6291	
Resp 5	0.000	13.7976	11.3055	

^{*}Obtained by t-Test comparison of mean scores.

TABLE 9

SURVEY ITEMS FOR WHICH RENTERS AND OWNERS DIFFERED SIGNIFICANTLY

			
Question Number	Probability*	Mean Scores Rent Own	
2	0.002	5.2109	3.7100
7	0.040	15.2296	13.9959
8	0.019	13.6370	14.9794
12	0.009	10.7388	12.2992
16	0.035	12.3630	11.1033
18	0.050	9.800	8.5455
22	0.004	11.3806	13.1088
23	0.001	5.1462	3.4914
28	0.030	8.3806	7.0661
29	0.001	7.0530	5.1519
39	0.018	6.9147	5.4553
40	0.017	10.7597	12.3333
41	0.008	5.6462	4.2318
42	0.043	7.6641	6.3432
44	0.004	12.8346	10.9129
Resp 3	0.039	9.0308	10.2996
Resp 8	0.014	8.9542	10.5084

 $^{{\}tt *Obtained}$ by t-Test comparison of mean scores.

APPENDIX C
A NOTE ON ETHICS

A NOTE ON ETHICS

The utilization of the survey herein described is such as to affect the practices of police officers through specific departmental policy and although the policies have a strong public, not police, origin there can be some impact on the overall equity of police operation. An example is present in the question involving auto theft when the owner leaves his keys in the ignition. Although the victim is somewhat complicit in the crime, the decision to use less than all normal efforts to recover his property may seem somewhat inequitable to the automobile owner. The situation further impacts on an economic class where a car may be necessary for transportation to and from employment and also represents a major investment that is now a major loss to the household. The question may be subjected to further attack if it is in any way, or by its nature is, loaded. Since the breadth of the survey covers the whole population of the municipality in this case, only a small percentage can actually be said to have had an experience with the events described in this kind of question. The question may be accused of preying upon human nature in soliciting responses that reinforce the general feelings in the police department. The researcher is in an ethnically questionable position when he designs social research that may lead to social change or stagnation instead of seeking some ultimate mirage of truth.

A problem of survey research is that idiographic responses are discounted or reduced by survey design in favor of nomothetic

ones. An individual responding to a survey questionnaire must limit himself to the format answer required. To a degree, the respondent is voluntarily placing himself into a position of diminished autonomy. The results may very well have a profound influence on his life, yet the design will reach a general conclusion from common trends. A design which the researcher knows beforehand will yield a general result due to the structure or nature of the question should be carefully considered. Victim complicity is certainly a legitimate issue, but true responses demand a survey item that is unquestionably clear, and clarity is a problem of some magnitude where the conciseness of an item is also of significance.

The responsibilities of the researcher are bound up in his position. In this kind of social research the experimenter is a single element that does not and cannot hold sway over all the activities of government and public service. Police department executives, city managers, and elected officials all have inputs into the final outcome of police resources and usage. The researcher's position must be to limit himself to his own arena of expertise. Recommendations, limitations, and assumptions based on the means and ends of research should be made clear to the other actors. The researcher has an obligation to advise the responsible agencies and to give them the clearest possible interpretations of the outcome of research, but he cannot and should not seek to bind truths and limit the search for the answers of decision-making authorities, such is the greater sin.

Bibliography

Books

- Fenstermaker, Roy. "Management Systems Engineering." In MIS:

 Management Dimensions, pp. 99-112. Edited by Raymond J.

 Coleman and M. J. Riley. San Francisco, Ca.: Holden-Day,
 Inc., 1973.
- Fink, Joseph and Sealy, Lloyd G. The Community and the Police Conflict or Cooperation? New York: John Wiley and Sons, Inc., 1974.
- French, Wendell L. and Bell, Cecil H., Jr. <u>Organization Development</u>. 2nd ed. Englewood Cliffs, N.J.: <u>Prentice-Hall</u>, Inc., 1978.
- Johnson, Deborah and Gregory, Robert J. "Police-Community Relations in the United States: A Review of Recent Literature and Projects." In Police-Community Relations, pp. 353-354. Compiled by Paul F. Cromwell, Jr. and George Keefer. St. Paul, Minn.: West Publishing Co., 1973.
- Kelly, Rita Mae. "Generalizations from an OEO Experiment in Washington, D.C." In Journal of Social Issues, vol. 3, no. 1, p. 64. Edited by Ezra Stotland. Society for the Psychological Study of Social Issues, 1975.
- More, Harry W. Effective Police Administration; A Behavioral Approach. San Jose, Ca.: Justice Systems Development, Inc.,
- Municipal Police Administration, 5th ed. Quoted in Paul M.

 Whisenand and R. Fred Ferguson, The Managing of Police
 Organizations. Englewood Cliffs, N.J.: Prentice-Hall, Inc.,
 1973.
- Nie, Norman H.; Hull, C. H.; Jenkins, J. G.; Steinbrenner, K.; and Bent, D. H. Statistical Package for the Social Sciences.

 New York: McGraw-Hill, 1975.
- Police and Community Relations: A Sourcebook. Quoted in Lee P.

 Brown, The Death of Police-Community Relations, Howard University Occasional Paper, vol. 1, no. 1, pp. 2-3. Washington, D.
 C.: Institute for Urban Affairs and Research, 1973.

- Smith, August William. "Toward a Systems Theory of the Firm."

 In MIS: Management Dimensions, pp. 93-99. Edited by
 Raymond J. Coleman and M. J. Riley. San Francisco, Ca.:
 Holden-Day, Inc., 1973.
- Souryal, Sam S. Police Administration and Management. St. Paul, Minn.: West Publishing Co., 1977.
- Wasserman, Robert, Gardner, Michael Paul, and Cohen, Alana S.

 Prescriptive Package: Improving Police/Community Relations.

 Washington, D.C.: GPO, 1973.
- Whisenand, Paul M. and Ferguson, R. Fred. The Managing of Police Organizations. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1973.

Journals

- Evans, James W. "Organization Development and Crime Prevention: Sensitivity to Organization Clientele." Crime Prevention Review 4 (October 1976): 9.
- Norton, John J. "Proposition 13: Law Enforcement's Unlucky Number." The Police Chief 45 (September 1978): 24.
- Rabitalle, Earl W. "Tax Revolt, the Police Function and Police Training." The Police Chief 4 (November 1978): 24.

Proceeding

California Attorney General's Advisory Commission on Community - Police Relations. The Police in the California Community. Office of the Attorney General, March 31, 1973.

Unpublished report

Venezia, Peter S. and Bartholomew, B. D. "Community Survey of Public Attitude Toward Davis Police Department, 1974 - 1978."

Davis, Ca.: 1978. (Mimeographed.)